## REMARKS

In an Office Action dated March 12, 2004 (paper no. 8), the Examiner rejected claims 1-8 under 35 U.S.C. §103(a) as being unpatentable over Rinchiuso et al. (U.S. patent no. 6,144,651, hereinafter referred to as "Rinchiuso") in view of Chinitz et al. (U.S. patent no. 5,914,958, hereinafter referred to as "Chinitz"). The Examiner rejected claims 9-11 under 35 U.S.C. §103(a) as being unpatentable over Rinchiuso in view of Grube et al. (U.S. patent no. 6,005,848, hereinafter referred to as "Grube"). The rejections and objections are traversed and reconsideration is hereby respectfully requested.

The Examiner rejected claims 1-8 under 35 U.S.C. §103(a) as being unpatentable over Rinchiuso in view of Chinitz. In particular, the Examiner stated that Rinchiuso discloses receiving multiple uplink transmissions from multiple remote units (FIG. 1; col. 2, lines 12-20; col. 3, lines 20-25; col. 7, lines 17-25), determining multiple remote units (col. 3, lines 18-34; col. 7, lines 20-25), combining uplink transmissions of the multiple uplink transmissions that are associated with a subset of the multiple remote units to produce a combined signal (FIG. 6; col. 3, lines 18-34; col. 7, lines 25-29), and transmitting the combined signal to a base station to be broadcast via a downlink communication signals to the multiple remote units (FIG. 6; col. 7, lines 29-40).

The Examiner acknowledged that Rinchiuso does not disclose a subset of the multiple remote units that is determined based on an energy of an uplink transmission of each remote unit of the multiple remote units. However, the Examiner contended that Chinitz discloses determining a subset (FIG. 1, remote units 104-106 and 107-109) of multiple remote units based on an energy of an uplink transmission of each remote unit. More particularly, the Examiner contended that a subset of remote units (group members A to D of FIG. 5) is determined based on an energy of the uplink transmission of each remote unit (group members A to D are determined based on inbound full rate or low rate links, wherein group member D is a full rate link, that is, a "high energy link").

The applicants respectfully disagree with the Examiner's interpretations of both Rinchiuso and Chinitz. Rinchiuso teaches a broadcast-multicast session, not a group call.

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That is, Rinchiuso merely teaches downlink transmission of multicast data received from a multicast server via a downlink common communication channel and teaches nothing of receiving uplink transmissions from multiple remote units and combining the uplink transmissions to produce a combined signal for downlink transmission. In Rinchiuso, a remote unit conveys to a base station a request to participate in a broadcast-multicast session and, in response to the request, is joined to the session. The base station allocates a downlink common supplemental channel for broadcast of the session data to all participating remote units serviced by the base station, and then broadcasts data received from a broadcast-multicast server to the participating remote units via the allocated downlink common supplemental channel. The only uplink transmissions taught by Rinchiuso are the requests to participate in a broadcast-multicast session transmitted by each remote unit to the base station. These requests are not part of the broadcast-multicast session as they are merely requests to join the session and are never combined to produce a combined signal for downlink transmission.

Column 2, lines 12-20, of Rinchiuso merely teaches that data is received by the serving base station from the broadcast-multicast server and is then broadcast to the participating remote units. Column 3, lines 20-25, and column 7, lines 17-40, of Rinchiuso teach the same thing. That is, when a remote unit serviced by a base station requests to participate in a broadcast-multicast session, the base station joins the session if it has not already done so. The base station then informs the remote unit (and all other participating remotes serviced by the base station) of the downlink common supplemental channel via which the base station will broadcast the session data, which downlink common supplemental channel is defined by use of two spreading codes. When the base station receives broadcast-multicast data from the broadcast-multicast server, the base station broadcasts the data to all participating remote units via the downlink common supplemental channel. Nowhere do the sections of Rinchiuso cited by the Examiner teach anything concerning receiving uplink transmissions from multiple remote units and combining the uplink transmissions to produce a combined signal for downlink transmission.

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Chinitz teaches an infrastructure that receives a request from a mobile station for a group call. In response to receiving the request, the infrastructure assigns a low rate inbound signaling link, that is, a control link, to the other members of the group and permits the group member setting up the call (the talker) to transmit over a full rate inbound link. The FIG. 5 referenced by the Examiner is just an example of one group member (group member D) talking over the inbound full rate link while the other group members or mobile stations (that is, group members A, B, and C) are connected to the infrastructure by inbound low rate signaling links. Chinitz says nothing concerning transmissions over these links and measuring an energy of such transmissions; instead, Chinitz merely discloses that the links are assigned to the group members. Furthermore, nowhere does Chinitz teach anything concerning determining a subset of multiple remote units based on an energy of transmissions by each remote unit via such links. In fact, talkgroup membership, and a talker determination, must be made prior to the assignment of the links to the remote units and therefore an energy of transmissions over such links cannot serve as a basis for making a group, and talker, membership determination.

Therefore, neither Rinchiuso or Chinitz, individually or in combination, teach the limitations of claim 1 of receiving multiple uplink transmissions from multiple remote units and determining a subset of the multiple remote units, wherein the subset is determined based on an energy of an uplink transmission of each remote from the multiple remote units, combining uplink transmissions of the multiple uplink transmissions that are associated with the subset to produce a combined signal, and transmitting the combined signal to a base station to be broadcast via a downlink communication signal to the multiple remote units. Accordingly, the applicants respectfully request that claim 1 may now be passed to allowance.

Since claims 2-5 depend upon allowable claim 1, the applicants respectfully request that claims 2-5 may now be passed to allowance.

Claim 6 includes limitations of receiving a first multiple uplink voice transmissions from multiple remote units, determining a second multiple uplink voice transmissions from the first multiple uplink voice transmissions, wherein the second multiple uplink voice transmissions are associated with a subset of the multiple remote

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units and are determined based on an energy of their transmission, combining the second multiple uplink voice transmissions, and transmitting the combined uplink voice transmissions to a base station to be broadcast via a downlink voice channel to the multiple remote units. As noted above, these limitations are not taught by Rinchiuso or Chinitz, individually or in combination. Accordingly, the applicants respectfully request that claim 6 may now be passed to allowance.

Since claims 7 and 8 depend upon allowable claim 6, the applicants respectfully request that claims 7 and 8 may now be passed to allowance.

The Examiner rejected claims 9-11 under 35 U.S.C. §103(a) as being unpatentable over Rinchiuso in view of Grube. Specifically, with respect to claim 9, the Examiner contended that Rinchiuso teaches receiving a first multiple uplink transmissions from a multiple remote units as an input and outputting a second multiple uplink transmissions taken from the first multiple uplink transmissions, wherein the second multiple uplink transmissions are associated with a subset of the multiple remote units and are determined based on an energy of each uplink transmission of the first multiple uplink transmissions, and combining the second multiple uplink transmissions to produce a combined signal. The Examiner acknowledged that Rinchiuso does not teach a transcoder but contended that Grube teaches a transcoder.

The applicants respectfully disagree. To begin and as noted above, nowhere does Rinchiuso teach receiving a first multiple uplink transmissions from a multiple remote units as an input and outputting a second multiple uplink transmissions taken from the first multiple uplink transmissions, wherein the second multiple uplink transmissions are associated with a subset of the multiple remote units and are determined based on an energy of each uplink transmission of the first multiple uplink transmissions, and combining the second multiple uplink transmissions to produce a combined signal.

With respect to the Examiner's citation of Grube, Grube teaches a group call involving multiple remote units, wherein a sub-group of the multiple remote units is determined and only the members of the sub-group are permitted to transmit uplink voice transmissions. Energy levels are not used to select from among the multiple received

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signals in Grube because no such selection is taught. Instead, only select remote units are permitted to transmit and then all received signals are combined. This is different from claim 9, wherein a logic unit receives uplink voice transmissions from multiple remote units that are all permitted to transmit and only received uplink voice transmissions of a subset of those permitted to transmit are combined.

Therefore, neither Rinchiuso nor Grube, individually or in combination, teach the logic unit of claim 9 having a first multiple uplink transmissions from a multiple remote units as an input and outputting a second multiple uplink transmissions taken from the first multiple uplink transmissions, wherein the second multiple uplink transmissions are associated with a subset of the multiple remote units and are determined based on an energy of each uplink transmission of the first multiple uplink transmissions. Accordingly, the applicants respectfully request that claim 9 may now be passed to allowance.

Since claims 10 and 11 depend upon allowable claim 9, the applicants respectfully request that claims 10 and 11 may now be passed to allowance.

As the applicants have overcome all substantive rejections and objections given by the Examiner and have complied with all requests properly presented by the Examiner, the applicants contend that this Amendment, with the above discussion, overcomes the Examiner's objections to and rejections of the pending claims. Therefore, the applicants respectfully solicit allowance of the application. If the Examiner is of the opinion that any issues regarding the status of the claims remain after this response, the Examiner is invited to contact the undersigned representative to expedite resolution of the matter.

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